

PROCEEDINGS OF THE CLUB

OCTOBER 29, 1908

The meeting was called to order at the New York Botanical Garden at 3.30 P. M., Dr. M. A. Howe being asked to take the chair. The minutes of the meeting of October 13 were read and approved. Mr. Michael Levine was elected to membership. Mr. Percy Wilson was elected secretary.

A microscopic preparation of the red snow plant, *Sphaerella nivalis*, collected this autumn on Cape York, was exhibited by Dr. N. L. Britton, who received it from the secretary of the Peary Arctic Club. Dr. Tracy E. Hazen gave a brief description of this interesting plant and raised certain questions still unsolved concerning it.

The first subject on the published program was "A Recent Collection of Mosses from Panama," by Mr. R. S. Williams. The following synopsis of this paper was written for the secretary by Mr. Williams:

"For the time spent in the field this was much the smallest collection of mosses ever made by the speaker. It may be accounted for partly by the fact that most of the work was done in the latter part of the dry season, namely, during the last week of February, through March, and about three weeks of April, and partly because of the low level, mostly under 300 feet elevation, at which much of the collecting was done.

"In the city of Panama are a number of fine old ruins more or less overgrown with shrubs and smaller plants but not a single species of moss was observed. On going to Penonome, some hundred miles west of the Canal Zone on the Pacific coast, the conditions were found to be much the same. One species of moss, however, was found abundantly fruiting in a cultivated field of cassava. This was *Bryum coronatum* Schwaegr., a world-wide species of the tropics and occurring as far north as Florida. On going a few miles back of the town, among the foothills and low mountains, various mosses become not uncommon, growing chiefly on trees, but even here very few species were obtained in

anything like good fruiting condition. On leaving Penonome a trip was made southeast of the canal along the Pacific coast about 100 miles to the Gulf of San Miguel, and up the Tuira river about 70 miles into the the interior to the mining camp of Cana. Here much more favorable conditions were found, Cana being situated at an altitude of 2,000 feet above the sea with the Espirito Santo mountains just back of the town, rising 5,000 feet higher. Mosses and liverworts were fairly abundant and at a more favorable season doubtless a large collection might be made.

"Of the 30 species brought back from both sides of the Canal Zone, five sixths are known to be South American. Two of these, *Pilotrichum amazonum* Mitt., collected originally by Spruce on the Amazon, and *Lepidopilum brevipes* Mitt., found by Spruce in the Andes at 3,000 feet, had not been since reported by any other collector. The five remaining species appear to be unknown outside of Central America. They are *Syrrhopodon Bernoullii* C. M. ; a species belonging to the very large genus *Macromitrium*, apparently undescribed ; a species of *Cryphaca*, also undescribed, and bearing numerous propagula on the stems ; *Porotrichum cobanense* C. M. and *Cyclodictyon Liebmanni* Schimp., these last two being previously known only from the type localities."

The second paper, "The Morphology of *Taenioma*," by Miss Elizabeth I. Thompson, was not read, as Miss Thompson was absent.

Dr. N. L. Britton gave a brief account of *Rhipsalis*, a genus of the Cactaceae whose members are pendulous from tree trunks or rocks. Most of these plants occur in Tropical America, but a few species, strange to say, are found in tropical east Africa. Of the fifty-three species that have been recognized, the speaker discussed chiefly those of Mexico, Central America, and the West Indies, illustrating his remarks with herbarium specimens.

Dr. Tracy Hazen described in detail an interesting phase in the development of a species of *Chaetophora* found in the brook flowing through the herbaceous valley of the New York Botanical Garden. This investigation is, however, not yet complete. Dr. Hazen stated incidentally that the algal flora of this brook appeared to be considerably richer now than it was a few years

ago; and a discussion followed as to the presence of additional forms, some attributing it to insects, frogs, and other minor aquatic animals, and others to the wild ducks that frequent this brook through the summer season.

W. A. MURRILL,
Secretary pro tem.

NOVEMBER 10, 1908

The Club met at the American Museum of Natural History and was called to order by Vice-President Burgess at 8:15 P. M. About 95 persons were present.

After the reading of the minutes of the meeting of October 29, Dr. N. L. Britton delivered the lecture of the evening on "Trees of the Vicinity of New York". The lecture was illustrated by lantern slides from the Van Brunt collection and was of a popular nature. The trees were taken up in a biological order, beginning with the gymnosperms, and the photographs exhibited illustrated both the general habit of the trees discussed and details of their flowers and fruit.

MARSHALL A. HOWE,
Secretary pro tem.

OF INTEREST TO TEACHERS

THE CAMERA LUCIDA FOR CLASS DEMONSTRATION

BY ROBERT GREENLEAF LEAVITT

So far as I have seen, the use of the camera lucida for purposes of demonstration with classes, as now to be described, has not heretofore been put into print; though it is altogether likely that others beside myself have hit upon the device. The idea first occurred to me when showing visitors at the laboratory the workings of the compound microscope. The camera lucida always greatly pleases the uninitiated by its magical power of bringing the pencil into the field of the instrument, and of instantly conferring upon the novice the skill of the draftsman. It occurred to me, while exhibiting under the microscope and explaining some of the objects one usually shows to these people, such as algae or stained